

Serial No. 09/686,572
Final Amendment and/or Response
Reply to final Office Action of
October 14, 2008

Reply under 37 CFR 1.116
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Amendment to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1-3. (Cancelled)

4. (Previously Presented) The method of claim 6, wherein the control code comprises part of an EPG or ECG.

5. (Cancelled)

6. (Previously Presented) A method of configuring and using a universal remote, the method comprising:

enabling a user to specify to a server on the internet at least one apparatus to be controlled by the universal remote which universal remote has a touch screen GUI, the server on the internet including a database of code sets, each
5 apparatus having a corresponding dedicated remote with a control panel;

enabling the server on the internet to identify a control code corresponding to each specified apparatus and to provide the control code as data in a mark-up language format;

10 providing each identified control code over the internet to a home network, the mark-up language format control code including (1) a code set representative of commands to control a state of the specified apparatus and (2) code to control the touch screen GUI to display a graphical representation of the control panel of the dedicated remote of the specified apparatus including icons and soft keys;

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- 15 the control code not being usable by the specified apparatus until the
control code is converted into commands and transmitted to the apparatus by an IR or
RF transmission independent of the internet, wherein the apparatus is not
preconfigured to deliver or cause delivery of its respective control code to the control
device;
- 20 enabling the universal remote to convert the control code into (1) the
associated commands to control the specified apparatus and (2) the soft keys and the
graphical representation of the icons on the touch screen GUI of the universal remote
such that the touch screen GUI depicts the control panel of the dedicated remote
corresponding to the specified apparatus;
- 25 using the soft keys of the displayed control panel on the touch screen
GUI to enable the universal remote to send commands to the specified apparatus via
the IR or RF transmission.

7-13. (Cancelled)

14. (Currently Amended) A remote control device configured for
receiving a control code from a source over a bidirectional data network, the control
code comprising data in a language format, the control code representative of
(1) commands for a selected apparatus and (2) soft key positions and icons for control
5 keys of a dedicated remote corresponding to the selected apparatus, the remote control
device comprising:
 a GUI display panel on which the soft keys and icons are rendered;
 the remote control device being configured to use the control code
representative of the soft key positions and icons for the control key of the dedicated
10 remote corresponding to the selected apparatus to render a graphical representation on
the GUI display panel depicting the control keys of the dedicated remote for the
selected apparatus in which the[[y]] keys and icons for selecting the commands for

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the selected apparatus are in the same location as the corresponding keys and icons of the dedicated remote such that when a user switches between the remote control
15 device and the dedicated remote, the control keys are in the same position and have the same function as the dedicated remote;

the remote control device being configured to convert the control code from a form that is not usable on the selected apparatus to be controlled into a command that is usable by the selected apparatus to change a state of the selected
20 apparatus; and

a transmitter converting the at least one selected command into an IR or RF signal which is transmitted to control the selected apparatus.

15. (Cancelled)

16. (Previously Presented) A machine readable memory on which code is stored for controlling CE equipment and for being supplied in an XML format, the control code (1) representing an IR or RF signal for transmission by a remote control device to the CE equipment and (2) rendering a control key layout that
5 emulates a key layout of a dedicated control device for the CE equipment.

17. (Previously Presented) A method comprising:
enabling each of a plurality of users to specify to a server, over a bidirectional data network, a user specified apparatus for being controlled by a universal control device of a user;
5 enabling the server to identify XML tags that specify control codes included in data in XML language format, the control codes being representative of control codes for controlling the user specified apparatus and sending instructions for rendering icons and soft buttons which emulate control keys of a remote control for the specified apparatus; and

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10 enabling the server to communicate over the bidirectional data network
with a home network that comprises the user's control device for delivery of the
control codes to the control device, wherein the control codes are not directly usable
by the specified apparatus until conversion of the control codes by the home network
into commands that can be sent by the control device to the specified apparatus
15 independent of the bidirectional network.

18. (Previously Presented) A method, comprising:
providing control codes in an XML mark-up language format to a
home network comprising a control device for installation on the control device, a
first set of control codes with rendering instructions for rendering a graphical
5 representation on a GUI touch screen using an XSL style sheet, and a second set of
control codes representing commands suitable for transmission by the control device
over an IR or RF network to a CE equipment to control the state of the CE equipment,
the control codes being provided from a database over a bidirectional data network to
the home network, wherein the equipment is not pre-configured to deliver or cause
10 delivery of its respective control code to the control device.

19. (Cancelled)

20. (Previously Presented) The method of claim 14, wherein the
language format includes a mark-up language.

21. (Previously Presented) The method of claim 14, wherein the
bidirectional network includes the internet and the source is located on the internet
and remote from the apparatus and the network.

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22. (Previously Presented) The database of claim 31, wherein the bidirectional network includes the internet, the plurality of home networks each being connected with the internet to receive control codes requested from the database over the internet.

23. (Cancelled)

24. (Previously Presented) The method of claim 17, wherein the bidirectional network includes the internet, the user specifying the apparatus to be controlled over the internet to the server, which server is remote from and not a part of the home network or the specified apparatus, and the control code is sent via the
5 internet to the home network to the controlled device.

25. (Previously Presented) The method of claim 18, wherein the database is remote from and not a part of the home network and not a part of the CE equipment.

26. (Previously Presented) The method of claim 25, wherein the bidirectional network includes the internet, the control codes being sent over the internet from the database to the home network.

27-28. (Cancelled)

29. (Previously Presented) The method of claim 17, further including:

on a touch screen GUI display element, generating a graphical representation depicting the remote control for the specified apparatus.

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30. (Previously Presented) The method of claim 18, wherein
wherein the rendering instructions render a graphical representation on a remote
controller for the CE equipment which is to be controlled, the graphical representation
being displayed on a touch screen such that the user can select among the control
5 codes by touching the touch screen.

31. (Previously Presented) A memory for storing a database,
comprising:
control codes for controlling apparatuses through remote control
devices, the control codes representative of commands suitable for by the remote
5 control devices to the apparatuses over an IR or RF network and being formatted in a
mark-up language, the database being in communication over a bidirectional data
network with a plurality home network systems each of which comprises at least a
remote control device, the control codes being deliverable to the remote control
devices independent of the controlled apparatuses, the control codes being described
10 in XML format with XML tags which define (1) control parameters including one or
more of: carrier frequency, duty cycle, protocol type, repetition type, on/off times of
the signal and bit pattern of command codes and (2) at least one of: a type of the
controlled apparatus and a brand name of the controlled apparatus;

wherein the control codes further include:
15 a definition of a GUI display panel and soft key locations which when
rendered on the GUI display panel display icons and buttons in the same position and
with a common function as a dedicated remote for the controlled apparatus.

32. (Previously Presented) The method of claim 17, wherein
rendering the icons and soft buttons to emulate the control key of the remote control
for the specified apparatus includes:

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rendering the icon or soft button in the same relative location as the
5 control key of the remote for the specified apparatus which performs the same
function.

33. (Previously Presented) A universal remote control for
controlling any one or more consumer appliances, each consumer appliance having a
standard remote control with a corresponding key pad layout, the universal remote
control comprising:

5 a touch screen display;
an IR or RF transmitter;
a memory;
an interface;
a processor programmed to:
10 receive an input indicative of a consumer appliance to
be controlled,
control the interface to go via the internet to a website
and retrieve (1) IR or RF control codes for the consumer appliance to
be controlled and (2) a description of a key pad layout corresponding
15 to the standard remote control for the consumer appliance to be
controlled;
store the retrieved IR or RF control codes and the key
pad layout description in the memory;
control the touch screen to display icons depicting the
20 key pad layout corresponding to the standard remote control for the
consumer appliance to be controlled, and
in response to one of the icons displayed on the control
screen being touched, controlling the IR or RF transmitter to transmit a
control code represented by the touched icons,

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25 wherein by the universal remote control emulates the standard remote controls for one or more controlled consumer appliances.